

SEA FOOD FOR SALE

PHENOMENAL DEVELOPMENT OF TEXAS FISHERIES within the past decade has brought the State from obscurity to acclaim as one of the leaders in the nation from the standpoints of both volume and value of commercial fishery products.

Going back to 1930, the total catch of under 16 million pounds at the low prevailing price of 5c per pound brought the fishermen only \$780,000. When one considers the catch elsewhere in the nation, this was extremely low. The catch then was about 2/3 shrimp taken by beach seines and a few small otter trawlers in the inside waters. The other third was chiefly redfish, black drum, and speckled trout taken by gillnet and beach seine in the bayous and inside bays.

Shrimp, by far the most important species, accounted in 1957 for 54% of the landed weight, and 94% of the value. As late as 1940, 407 otter trawlers took but 14,780,000 pounds of shrimp. By 1957 this had risen to 76,830,000 pounds taken by 2,184 vessels. Despite this fivefold increase in the number of vessels the annual catch per vessel remained level, which might indicate substantial supplies.

Texas commercial fishery landings (in thousands of pounds) and their value (in thousands of dollars)

	Red Snapper	Black Drum	Red- fish	Speckled Trout	Oys- ters	Men- haden	Shrimp	Total All Species	Value
1930	930	1,052	873	1,043	1,157	0	10,189	15,693	\$ 777
1940	1,233	492	265	752	1,297	0	14,779	19,369	993
1950	1,233	708	567	582	125	47,191	45,812	97,251	11,265
1957	1,433	1,502	504	898	953	57,585	76,825	140,310	34,115

Texas units of commercial fishing gear

	Gill Nets	Trammel Nets	Beach Seines	Oyster Dredges	Purse Seines	Otter Trawls
1930	487	80	63	38	0	264
1940	293	41	0	86	0	407
1950	31	42	4	18	10	1,506
1957	39	63	10	107	14	2,184

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However, this is only a portion of the story. During the early 1940s the entire Texas shrimp catch consisted of white shrimp, *Penaeus setiferus*, a very large share of which was caught in inside waters by vessels up to 40 or occasionally 45 feet in length. During the past decade the white shrimp have declined in abundance. This decline may have been either caused or accentuated by the long drought period of the late 40s and early 50s, drastically raising the salinities in many of our usually brackish water estuaries which the juvenile shrimp use as nursery areas.

As the white shrimp declined in abundance the dealers commenced about 1947 to market the brown shrimp, *Penaeus aztecus*. Because of the scarcity of white shrimp and the heavy demand, the browns were gradually accepted. This change from white to brown shrimp (the 1957 shrimp catch was 94% browns) caused a change in fishing habits. Brown shrimp move out of the protected inside waters throughout the summer and at a smaller size than the whites. To take large quantities of marketable size brown shrimp the fishermen now had to fish the outside waters of the Gulf. This meant longer trips, more ice, sturdier gear, and larger vessels. The large vessels of today range from 60 to 70 feet in length. Within the past three years the "double rig" has become common. This consists of two trawls, fished simultaneously, on both port and starboard. Although this has increased the catching power of the vessel, it also may have increased costs.

There has been some shift in shrimp landings at different ports. The Brownsville-Port Isabel area was of very minor importance during the heyday of the white shrimp. In 1940 the Cameron County production was only 123,000 pounds, worth \$49,000. By 1950, with the market established for brown shrimp, the catch rose to over 17 million pounds, worth \$3.8 million. Since then the building of larger vessels that range as far as the Campeche Banks has raised the catch to over 30 million pounds, worth \$14 million.

A menhaden plant which operated near Galveston about 1915 failed. The industry was revived in 1948, and two plants now operate at Port Arthur and Sabine Pass. Large vessels, 80 to 100 feet in length, tow the purse seine boats to sea, where the 500-yard seine is set and pursed by these smaller boats. The catch of these oil-rich, herring-like fish is then pumped out of the net into the larger vessel. Even though Texas laws have restricted the fishery to Jefferson County, the 1957 catch was 58 million pounds. Years ago the meal was used principally as fertilizer, but today the trips are kept short, the fish are landed in good condition and the protein-rich meal is used as the animal protein ingredient in poultry and stock feed. This is the second fishery in volume in Texas.

Production in the oyster industry, which was well established at an early date, fluctuated around a million pounds, worth \$100,000. During earlier years the

heaviest production was in the Matagorda-Lavaca Bay area with lesser production from Galveston and Corpus Christi Bays. Between 1940 and 1950 production dropped from 1,300,000 pounds to 125,000 pounds, a tenfold decrease.

This decline in oyster production may be partially ascribed to the prolonged drought, starting in the mid-40s, which changed brackish-water bays into salt pans. Since the breaking of the drought, there has been considerable recovery. Corpus Christi Bay which had declined until production was nil began producing again, and Galveston Bay production increased so that the 1957 production was 953,000 pounds. Galveston Bay has been the most consistent producer because of the heavy local rainfall, even during drought periods.

Minor commercial fisheries exist for redfish, black drum, and speckled trout. The landings shown in the table are both those netted by commercial fishermen, and those caught by hook-and-line as sport fish, but sold commercially. The black drum is very abundant in many bay areas so that the catch is limited chiefly by the price.

The red snapper catch was formerly made by a small fleet of hook-and-line vessels fishing chiefly out of Galveston. Although this fleet has dwindled, the landings have increased slightly. This is partially due to occasional red snapper trips by shrimp vessels during off-season shrimp periods, and partially to the fact that since the shrimpers are now taking chiefly brown shrimp which range farther and farther offshore as they grow larger, the vessels are catching a few red snapper in their otter trawls.

A sizeable fishery for shrimp to sell for sport fishing bait is carried on at many points along the Coast. Because of the scattered localities, and numerous dealers this fishery has never appeared in the commercial statistics. In 1957-58 the U. S. Bureau of Commercial Fisheries assigned special agents in the Galveston area to gather data on this fishery. In the Galveston Bay area alone they found over 200 bait stands selling live and dead bait shrimp, to the amount of nearly 1 million pounds, worth \$1 million a year. Considering the long coastline that was not canvassed, it would appear that this fishery for bait shrimp exceeds in value the fisheries for all the minor species.

Future of Texas' fisheries will depend to a large extent on what happens to the shallow protected bays, estuaries, marshes, and bayous. These are the nursery areas where the post-larval shrimp settle to the bottom and in a few short months make a phenomenal growth before departing on their seaward migration. Schools of menhaden, like the shrimp, spawn offshore, and the tiny post-larvae likewise enter the passes between the barrier islands into the shallow brackish waters where they spend their first summer. This offshore spawning of adults, with the young growing up in the shallow areas is also typical of mullet, tarpon, and red and black drums.

Persons interested in the welfare of our State fisheries must jealously guard these protected inside waters against pollution, and against changes in water circulation or water quality that will degrade their value.**

commercial fishing

